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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/917,398

07/27/2001

Miodrag Temerinac

Micronas.5877

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7590

01/25/2005

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EXAMINER

FERRIS, DERRICK W

ART UNIT

PAPER NUMBER

2663

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/917,398

Applicant(s)

TEMERINAC, MIODRAG

Examiner

Derrick W. Ferris

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date see attached.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claim 1** is rejected under 35 U.S.C. 102(b) as being anticipated by WO 98/10568 to *Aironet Wireless Communications* (“*Aironet*”).

As to **claim 1**, *Aironet* teaches a second embodiment which adjusts the modulation scheme. In particular, figure 3 shows a packet 300 comprising of a control section as a header 310 and a data section as data bits 320. *Aironet* also teaches that the header 310 and the data section are transmitted at different rates, see e.g., page 17, lines 6-16. As the invention teaches multiple combinations, one combination is sending the header 310 at a slower rate than the data bits 320. Thus the claims limitations are anticipated.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. **Claims 2, 3, 6, and 9-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/10568 to *Aironet Wireless Communications* ("*Aironet*") in view of U.S. Patent No. 5,982,807 A to *Snell*.

As such to **claim 2**, *Aironet* discloses the limitations in the base claim. In addition, figure 3 also teaches situating the control section before the data section. *Aironet* also teaches the higher reception data rate being at least as high as the transmission data rate of the data section by teaching a middle and a fast rate (i.e., 11 chip BPSK and 11 chip QPSK respectively).

Aironet is silent or deficient to the further limitation of using a control signal that switches the receiver to a higher data rate for receiving the data of the data section.

Snell teaches the further recited limitation above at e.g., column 6, lines 47-67 through the use of a SIGNAL field for a PLCP header. Also see e.g., figure 3. For the purpose of the rejection, the PLCP header is part of the header. *Snell* also teaches that the header may be at a different rate than the data portion, see e.g., column 7, lines 5-15.

The proposed modification of the above-applied reference(s) necessary to arrive at the claimed subject matter would be to modify *Aironet* by clarifying the use of a SIGNAL field which specifies the type of data rate/modulation used.

As such, examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the above limitation. In particular, the motivation for modifying the reference or to combine the reference teachings would be to obtain higher data rates and switch "on-the-fly" between different data rates and/or formats. In particular, *Snell* cures the above-cited deficiency by providing a motivation found at e.g.,

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column 2, lines 13-30. Second, there would be a reasonable expectation of success since both references teach spread spectrum. Thus the references either in singular or in combination teach the above claim limitation(s).

As to **claim 3**, see e.g., column 6, lines 48-67 of *Snell* which teaches e.g., 1 Mbps BPSK and 5.5 Mbps BPSK.

As to **claim 6**, see similar rejection to claim 2. In addition, both references teach a SYNC field, see e.g., figure 3 of *Snell* and page 17, lines 6-16 of *Aironet*. An address field is also taught as receiver system setup data as taught e.g., at page 17, lines 6-16 of *Aironet* since the receiver is acknowledged individually. An acknowledgment is also taught by *Aironet* at e.g., page 16, lines 10-15 with respect to negative and positive acknowledgments which are used to adjust the data rate.

As to **claim 9**, see similar rejection to claim 2.

As to **claim 10**, see similar rejection to claim 6 with respect to acknowledgements.

As to **claim 11**, see similar rejection to claim 1 with respect to data rate.

5. **Claims 4, 5, 7 and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/10568 to *Aironet Wireless Communications* ("*Aironet*") in view of U.S. Patent No. 5,982,807 A to *Snell* and in further view U.S. Patent No. 4,899,367 A to *Sampei*.

As such to **claim 4**, *Aironet* and *Snell* may be silent or deficient to the further limitation wherein the transmission and reception data rate is increased by increasing the multi-valent symbol coding of the transmitted data, while retaining the channel bandwidth (B) and the symbol period (T_{symbol}).

Sampei teaches the above motivation with respect to figure 10 since both GMSK and 256 QAM are taught at a same frequency (i.e., retaining the channel bandwidth (B) and same symbol period).

Thus the examiner proposes to modify *Aironet* and *Snell* to further include GMSK and 256 as modulation schemes. Examiner notes the above example is the same example presented in applicant's figure 2.

As such, examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the above limitation. In particular, the motivation for modifying the reference or to combine the reference teachings would be to obtain higher data rates and switch "on-the-fly" between different data rates and/or formats. In particular, *Snell* cures the above-cited deficiency by providing a motivation found at e.g., column 2, lines 13-30. In addition, *Snell* also teaches that different modulation types are used, see e.g., column 6, lines 26-34.

As to **claim 5**, see combined rejections for claims 3 and 4. As such, see e.g., column 6, lines 48-67 of *Snell* and top of page 15 of *Aironet* with respect to selecting different modulation techniques where the data rate is increased by both increasing the channel bandwidth with time-compression of the transmitted symbols and by increasing the symbol coding of the transmitted data. *Sampei* further teaches using GMSK as a modulation scheme.

As to **claim 7**, see similar rejection to claim 4.

As to **claim 8**, see similar rejection to claim 5.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (571) 272-3123.

The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Derrick W. Ferris
Examiner
Art Unit 2663


DWF


Derrick W. Ferris